



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0834; Directorate Identifier 2012-NM-045-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to supersede airworthiness directives AD 2003-14-11, AD 2004-11-08, AD 2004-13-25, AD 2004-18-14, AD 2008-06-07, and AD 2012-04-07 that apply to certain Airbus Model A330 and A340 series airplanes. AD 2003-14-11, AD 2004-11-08, AD 2004-13-25, AD 2004-18-14, AD 2008-06-07, and AD 2012-04-07 required revising the maintenance program to incorporate certain maintenance requirements and airworthiness limitations; replacing certain flap rotary actuators; repetitively inspecting elevator servo-controllers and pressure relief valves of the spoiler servo controls (SSCs); repetitively testing the elevator servo control loops, modifying the elevator servo controls, and repetitively replacing certain retraction brackets of the main landing gear; and revising the airplane flight manual. Since we issued those ADs, we have determined that more restrictive maintenance requirements and airworthiness limitations are necessary. This proposed AD would require revising the maintenance program to incorporate certain maintenance requirements and airworthiness limitations. The proposed AD also removes Airbus Model A340-200, -300, -500, and -600 series airplanes from the applicability. We are proposing this AD to address the aging effects of aircraft systems. Such aging effects could change the characteristics leading to an

increased potential for failure, which, in isolation or in combination with one or more other specific failures or events, could result in failure of certain life limited parts, which could reduce the structural integrity of the airplane or reduce the controllability of the airplane.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Airbus SAS, Airworthiness Office – EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com); Internet <http://www.airbus.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1138; fax (425) 227-1149.

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2013-0834; Directorate Identifier 2012-NM-045-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

## **Discussion**

On July 7, 2003, we issued AD 2003-14-11, Amendment 39-13230 (68 FR 41521, July 14, 2003), for all Airbus Model A330 and A340 series airplanes. AD 2003-14-11 required revising the Airworthiness Limitations Section of the Instructions for Continued Airworthiness to incorporate life limits for the servo-controls located on the ailerons and replacement of the servo-controls with new servo-controls when they have reached their operational life limits. AD 2003-14-11 resulted from a revision of Airbus airworthiness limitations which introduced more restrictive maintenance requirements and airworthiness limitations. We issued AD 2003-14-11 to prevent hydraulic leakage and failure of the servo-controls due to cracks in the end caps and along the barrel, which could result in loss of the ailerons and consequent reduced controllability of the airplane.

On May 20, 2004, we issued AD 2004-11-08, Amendment 39-13654 (69 FR 31874, June 8, 2004), for certain Airbus Model A330, A340-200, and A340-300 series airplanes. AD 2004-11-08 required replacement of flap rotary actuators with modified flap rotary actuators. AD 2004-11-08 resulted from reports of fatigue failure of rotary actuator levers. We issued AD 2004-11-08 to prevent fatigue failure of the rotary actuator lever for the flaps, which could result in loss of the flap surface and consequent reduced controllability of the airplane.

On June 24, 2004, we issued AD 2004-13-25, Amendment 39-13707 (69 FR 41394, July 9, 2004), for certain Airbus Model A330, A340-200, and A340-300 series airplanes. AD 2004-13-25 required repetitive inspections to check the play of the eye-end of the piston rod of the elevator servo-controls and corrective actions if necessary, and replacement of certain elevator servo-controls with new, improved servo-controls. We issued AD 2004-13-25 to detect and correct excessive play of the eye-end of the piston rod of the elevator servo controls, which could result in failure of the elevator servo-control.

On October 19, 2004, we issued AD 2004-18-14, Amendment 39-13793 (69 FR 55326, September 14, 2004), for certain Airbus Model A330 and A340-200 and -300 series airplanes. AD 2004-18-14 required revising the Limitations Section of the airplane flight manual (AFM) to ensure that the flightcrew is advised of the proper procedures in the event of uncommanded movement of a spoiler during flight; inspecting the function of the pressure relief valves of each SSC, and performing corrective action if necessary; and eventually modifying the SSCs, which terminated the AFM revision. AD 2004-18-14 resulted from several reports of incidents where an SSC was not locked in the retracted position during flight. We issued AD 2004-18-14 to prevent uncommanded movement of a spoiler during flight, which could result in reduced controllability of the airplane and consequent significant increased fuel consumption during flight, which could necessitate an in-flight turn-back or diversion to an unscheduled airport destination.

On March 3, 2008, we issued AD 2008-06-07, Amendment 39-15419 (73 FR 13103, March 12, 2008), for all Airbus Model A330-200, A330-300, A340-200, and A340-300 series airplanes. A correction of AD 2008-06-07 was published in the Federal Register on April 15, 2008 (73 FR 20367). AD 2008-06-07 required revising an accelerated schedule of repetitive testing of the elevator servo control loops, and doing corrective actions if necessary. AD 2008-06-07 resulted from reports of failed elevator servo controls due to broken guides. We issued AD 2008-06-07 to prevent failure of the elevator servo controls during certain phases of takeoff, which could result in an unannounced loss of elevator control and consequent reduced controllability of the airplane.

On February 14, 2012, we issued AD 2012-04-07, Amendment 39-16963 (77 FR 12989, March 5, 2012), for all Airbus Model A330-200, A330-300, A340-200, and A340-300 series airplanes. AD 2012-04-07 required replacement of certain retraction brackets of the main landing gear (MLG). AD 2012-04-07 resulted from reports of retraction brackets failures during fatigue testing before accumulation of the life limit of the MLG. We issued AD 2012-04-07 to prevent failure of the retraction bracket, which could result in a MLG extension with no damping, and consequent structural damage of the MLG.

#### **Actions Since Existing ADs were Issued**

Since we issued AD 2003-14-11, Amendment 39-13230 (68 FR 41521, July 14, 2003); AD 2004-11-08, Amendment 39-13654 (69 FR 31874, June 8, 2004); AD 2004-13-25, Amendment 39-13707 (69 FR 41394, July 9, 2004); AD 2004-18-14, Amendment 39-13793 (69 FR 55326, September 14, 2004); AD 2008-06-07, Amendment 39-15419 (73 FR 13103, March 12, 2008); and AD 2012-04-07, Amendment 39-16963 (77 FR 12989, March 5, 2012); we have determined that more restrictive maintenance requirements and airworthiness limitations are necessary.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2012-0020, dated January 30, 2012 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

The mandatory instructions and airworthiness limitations applicable to the Ageing Systems Maintenance (ASM) are specified in Airbus A330 ALS Part 4, which is approved by the European Aviation Safety Agency (EASA).

The revision 03 of Airbus A330 ALS Part 4 introduces more restrictive maintenance requirements and/or airworthiness limitations. Failure to comply with the instructions of ALS Part 4 could result in an unsafe condition.

This [EASA] AD requires the implementation of the maintenance requirements and/or airworthiness limitations as specified in Airbus A330 ALS Part 4 revision 03, approved on 09 September 2011. In addition, this [EASA] AD supersedes DGAC [Directorate General for Civil Aviation] France ADs and EASA ADs listed in the “Supersedure” section above, whose requirements have been transferred into Airbus A330 ALS Part 4.

The unsafe condition is the aging effects of aircraft systems. Such aging effects could change the characteristics leading to an increased potential for failure, which, in isolation or in combination with one or more other specific failures or events, could result in failure of certain life limited parts, which could reduce the structural integrity of the airplane or reduce the controllability of the airplane. You may obtain further information by examining the MCAI in the AD docket.

#### **Relevant Service Information**

We reviewed Airbus A330 Airworthiness Limitations Section (ALS) Part 4 – Aging Systems Maintenance, Revision 03, dated September 09, 2011. The airworthiness limitations introduce mandatory instructions and more restrictive maintenance requirements.

#### **Related Rulemaking**

We have issued AD 2013–20–06, Amendment 39-17612 (78 FR 64156, October 28, 2013), for all Airbus Model A340-211 -212, -213, -311, -312, -313, -541, and -642 airplanes, to require revising the maintenance program to incorporate certain maintenance requirements and airworthiness limitations. AD 2013–20–06 terminates the requirements of the following ADs for Airbus Model A340 series airplanes only (this proposed AD supersedes the following ADs):

- AD 2003-14-11, Amendment 39-13230 (68 FR 41521, July 14, 2003);
- AD 2004-11-08, Amendment 39-13654 (69 FR 31874, June 8, 2004);
- AD 2004-13-25, Amendment 39-13707 (69 FR 41394, July 9, 2004);

- AD 2004-18-14, Amendment 39-13793 (69 FR 55326, September 14, 2004);
- AD 2008-06-07, Amendment 39-15419 (73 FR 13103, March 12, 2008; corrected April 15, 2008 (73 FR 20367)); and
- AD 2012-04-07, Amendment 39-16963 (77 FR 12989, March 5, 2012).

Because AD 2013–20–06 terminates the requirements of the preceding ADs for Airbus Model A340 series airplanes, we have not included Airbus Model A340 series airplanes in the applicability of this proposed AD. The applicability of this proposed AD is Airbus Model A330 series airplanes as specified in paragraph (c) of this AD.

#### **FAA’s Determination and Requirements of this Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

This proposed AD would retain none of the requirements of the following ADs:

- AD 2003-14-11, Amendment 39-13230 (68 FR 41521, July 14, 2003);
- AD 2004-11-08, Amendment 39-13654 (69 FR 31874, June 8, 2004);
- AD 2004-13-25, Amendment 39-13707 (69 FR 41394, July 9, 2004);
- AD 2004-18-14, Amendment 39-13793 (69 FR 55326, September 14, 2004);
- AD 2008-06-07, Amendment 39-15419 (73 FR 13103, March 12, 2008);
- AD 2012-04-07, Amendment 39-16963 (77 FR 12989, March 5, 2012).



This proposed AD would require implementation of certain maintenance requirements and airworthiness limitations. This proposed AD would also require accomplishing the actions specified in the service information described previously, except as discussed under “Differences Between this Proposed AD and the MCAI or Service Information.”

#### **Differences Between this Proposed AD and the MCAI or Service Information**

This NPRM proposes to incorporate Airbus A330 ALS Part 4 – Aging Systems Maintenance, Revision 03, dated September 9, 2011, including the compliance times for the actions; however, the compliance times for certain initial actions is different from those specified in Airbus A330 ALS Part 4 – Aging Systems Maintenance, Revision 03, dated September 9, 2011, because the actions were required by AD 2003-14-11, AD 2004-11-08, AD 2004-13-25, AD 2004-18-14, AD 2008-06-07, and AD 2012-04-07; therefore, the initial compliance time is relative to the effective date of the applicable superseded AD, as specified in paragraph (h) of this NPRM.

#### **Costs of Compliance**

We estimate that this proposed AD affects 71 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

##### **Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Revise maintenance program	2 work-hours X \$85 per hour = \$170	\$0	\$170	\$12,070

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 is revised to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by:

a. Removing Airworthiness Directives AD 2003-14-11, Amendment 39-13230 (68 FR 41521, July 14, 2003); AD 2004-11-08, Amendment 39-13654 (69 FR 31874, June 8, 2004); AD 2004-13-25, Amendment 39-13707 (69 FR 41394, July 9, 2004); AD 2004-18-14, Amendment 39-13793 (69 FR 55326, September 14, 2004); AD 2008-06-07, Amendment 39-15419 (73 FR 13103, March 12, 2008); AD 2012-04-07, Amendment 39-16963 (77 FR 12989, March 5, 2012); and

b. Adding the following new AD: Airbus: Docket No. FAA-2013-0834; Directorate Identifier 2012-NM-045-AD.

#### **(a) Comments Due Date**

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

This AD supersedes the ADs specified in paragraphs (b)(1) through (b)(6) of this AD.

(1) AD 2003-14-11, Amendment 39-13230 (68 FR 41521, July 14, 2003).

(2) AD 2004-11-08, Amendment 39-13654 (69 FR 31874, June 8, 2004).

- (3) AD 2004-13-25, Amendment 39-13707 (69 FR 41394, July 9, 2004).
- (4) AD 2004-18-14, Amendment 39-13793 (69 FR 55326, September 14, 2004).
- (5) AD 2008-06-07, Amendment 39-15419 (73 FR 13103, March 12, 2008).
- (6) AD 2012-04-07, Amendment 39-16963 (77 FR 12989, March 5, 2012).

**(c) Applicability**

This AD applies to Airbus Model A330-201, -202, -203, -223, -243, -223F, -243F, -301, -302, -303, -321, -322, -341, -342, and -343 airplanes; certificated in any category; all manufacturer serial numbers.

**(d) Subject**

Air Transport Association (ATA) of America Code 05, Time Limits/Maintenance Checks.

**(e) Unsafe Condition**

This AD was prompted by a determination that maintenance requirements and airworthiness limitations are necessary. We are issuing this AD to address the aging effects of aircraft systems. Such aging effects could change the characteristics leading to an increased potential for failure, which, in isolation or in combination with one or more other specific failures or events, could result in failure of certain life limited parts, which could reduce the structural integrity of the airplane or reduce the controllability of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Maintenance Program Revision**

Within 6 months after the effective date of this AD, revise the maintenance program by incorporating Airbus A330 Airworthiness Limitations Section (ALS) Part 4 – Aging Systems Maintenance, Revision 03, dated September 09, 2011. The initial compliance times for the actions are within the applicable compliance times

specified in the Record of Revisions pages of Airbus A330 ALS Part 4, Revision 03, dated September 09, 2011, or within 6 months after the effective date of this AD, whichever is later, except as required by paragraph (h).

**(h) Exceptions to Initial Compliance Times**

(1) Where A330 ALS Part 4 – Aging Systems Maintenance, Revision 03, dated September 09, 2011, defines a calendar compliance time for elevator servo-controls having part number (P/N) SC4800-2, SC4800-3, SC4800-4, SC4800-6, SC4800-7, or SC4800-8 as August 31, 2004, the calendar compliance time is June 13, 2007 (34 months after the effective date of AD 2004-13-25, Amendment 39-13707 (69 FR 41394, July 9, 2004)).

(2) Where A330 ALS Part 4 – Aging Systems Maintenance, Revision 03, dated September 09, 2011, defines a calendar compliance time for spoiler servo-controls (SSC) having P/N 1386A0000-01, P/N 1386B0000-01, P/N 1387A0000-01 or P/N 1387B0000-01 as December 31, 2003, the calendar compliance time is November 19, 2005 (13 months after the effective date of AD 2004-18-14, Amendment 39-13793 (69 FR 55326, September 14, 2004)).

(3) Where A330 ALS Part 4 – Aging Systems Maintenance, Revision 03, dated September 09, 2011, defines a calendar compliance time for elevator servo-controls having P/N SC4800-73, SC4800-93, SC4800-103 and SC4800-113 as June 30, 2008, the calendar compliance time is September 16, 2009 (17 months after the effective date of AD 2008-06-07, Amendment 39-15419 (73 FR 13103, March 12, 2008)).

(4) The initial compliance time for replacement of the retraction brackets of the MLG having a part number specified in paragraphs (h)(4)(i) through (4)(h)(xvi) of this AD is before the accumulation of 19,800 total landings on the affected retraction brackets of the MLG, or within 900 flight hours after April 9, 2012 (the effective date

of AD 2012-04-07, Amendment 39-16963 (77 FR 12989, March 5, 2012), whichever occurs later.

- (i) 201478303
- (ii) 201478304
- (iii) 201478305
- (iv) 201478306
- (v) 201478307
- (vi) 201478308
- (vii) 201428380
- (viii) 201428381
- (ix) 201428382
- (x) 201428383
- (xi) 201428384
- (xii) 201428385
- (xiii) 201428378
- (xiv) 201428379
- (xv) 201428351
- (xvi) 201428352

**(i) Alternative Intervals or Limits**

After accomplishing the revision required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (j)(1) of this AD.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1138; fax (425) 227-1149. Information may be emailed to: [9-ANM-Seattle-ACO-AMOC-Requests@faa.gov](mailto:9-ANM-Seattle-ACO-AMOC-Requests@faa.gov).

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(k) Related Information**

Refer to European Aviation Safety Agency (EASA) Airworthiness Directive 2012-0020, dated January 30, 2012, for related information. The mandatory continuing airworthiness information may be viewed on the Internet at <http://www.regulations.gov>.  
Issued in Renton, Washington, on August 21, 2013.

Stephen P. Boyd,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2013-26682 Filed 11/06/2013 at 8:45 am; Publication Date: 11/07/2013]